



European Construction Sector Observatory

Policy measure fact sheet Hungary

GIS Climate Friendly Home Panel
Programme (*ZBR Klímabarát Otthon
Panel Alprogram*)

Thematic Objective 3

March 2016

Implementing body:	Ministry of Local Government and Regional Development (Phase I); Ministry of National Development, and the Ministry of Rural Development (Phase II)
Key features & Objectives:	The programme supports the energy efficient renovation of industrialised prefabricated buildings
Implementation date:	Phase I: 2008 – March 2013 Phase II: August 2009 – March 2013
Targeted beneficiaries:	Condominiums ¹ and housing co-operatives, local governments
Budget (HUF):	Phase I: 14.6 billion HUF (EUR 47 million) Phase II: 16.6 billion HUF (EUR 53.7 million) from the Emissions Trading Scheme (ETS) allowances

In a nutshell

A study published in 2011 showed that 60% of Hungarian residential buildings blocks were built during the communist era (60's-70's) with concrete panel technology and have poor thermal insulation, 61% have old windows and doors and 90% are using obsolete heating systems. These buildings, designed to last 30-40 years, therefore have a suboptimal energy efficiency².

In light of the above, and in accordance with Government Decree 323/2007 (XII.11.) on the implementation of the Kyoto Protocol³, the Ministry of National Development in Hungary launched a comprehensive climate protection programme, the so-called Green Investment Scheme – GIS (*Zöld Beruházási Rendszer - ZBR*). The programme was designed to target energy efficiency improvement of different types of households.

The GIS Climate Friendly Home Panel Programme (*ZBR Klímabarát Otthon Panel Alprogram*) is one of the sub-programmes introduced by the Ministry under the framework of the ZBR. Through its two phases, it specifically supports the renovation of concrete block

type residential buildings to achieve energy savings and reduce CO₂ emissions. Under Phase I, 950 applications were received, 916 of which were approved. These had a value of HUF 14.03 billion (EUR 45.2 million). Under Phase II, 795 applications were received. Of these, 347 were approved, for a value of HUF 16.61 billion (EUR 53.7 million) as of March 2013. However, only 125 approved projects actually received payment, for a value of HUF 5.8 billion (EUR 18.8 million), i.e. 35% of the approved support.

The programme was appreciated by beneficiaries and construction companies, as it seemed to be a solution for reducing utility costs and supporting the ailing construction industry at the time of the crisis. Nevertheless, the programme reported issues related to the optimal planning of the budget, transparency and burden of bureaucracy, which created concerns among stakeholders.

General description

Under Phase I of the programme, applications for renovation projects could be submitted between February 1st and September 30th, 2008. Under Phase II, announced on July 29th 2009, applicants were able to submit their applications from August 4th to December 31st, 2009. Applications were managed by ÉMI Non-Profit Limited Liability Company for Quality Control and Innovation in Building (*Építésügyi Minőségellenőrző Innovációs Nonprofit Kft. - ÉMI*) between August 2009 and February 2010, and by the non-profit company Energy Centre (*Energia Központ Nonprofit Kft.*) between February 2010 and October 2012. As of October 2012, ÉMI took over the processing.

The programme was set up so as to motivate complex refurbishment projects and targeted housing cooperatives, condominiums and tenement houses⁴ in the ownership of municipalities, which were eligible to apply for support to renovate their buildings.

The funding scheme has multiple levels, consisting of the basic grant and an additional 'Climate Bonus' (for Phase II only). The basic grant can be provided for all valid (and approved) applications, amounting to one-third of the actual eligible costs (directly related to emission reduction), up to a maximum of HUF 500,000 (EUR 1,607) per household⁵. In addition, if the building achieves a predetermined energy category (C, B, A, A+, and A++) as a result of the renovations, it becomes eligible for 'Climate Bonus' funding as well. The amount of the 'Climate Bonus' depends on the energy category achieved: the higher the category, the greater the bonus. The bonus can amount to up to 10-27% of the eligible investment costs. In light of the above, applications for block buildings could be subsidised by up to a maximum of 60% of the eligible investment costs⁶.

In the framework of the programme, energy efficiency projects have been subsidised that measurably reduce carbon dioxide emissions and verifiably improve energy efficiency. The following interventions are eligible for funding under the programme:

- Replacement or renovation of doors and windows;
- Thermal insulation of facades or ceilings;
- Modernisation and restoration of building engineering systems (heating, ventilation, common electric network of block buildings);
- Increase of renewable energy usage by replacing old systems to generate, store and transport energy;
- Development of the building's summertime heat protection (sunshade, excluding mechanic cooling);
- Glazing terraces to use solar energy in a passive way.

Upon completion of the interventions, the Energy Centre monitors emission indicators for five years to verify the achieved improvements in energy efficiency. Within this monitoring process, applicants are obliged to provide the entity with energy consumption reports based on utility bills, by filling a predefined monitoring form once a year. Moreover, ex-post inspections can be carried out during the five-year maintenance period, checking the validity of the information provided, the technical aspects of the project implementation, as well as the utilisation of funds⁷. According to the programme's strategy, renovating tens of thousands of block building homes supports the reduction of Hungary's carbon dioxide emission by 1-1.2 tonnes per home⁸.

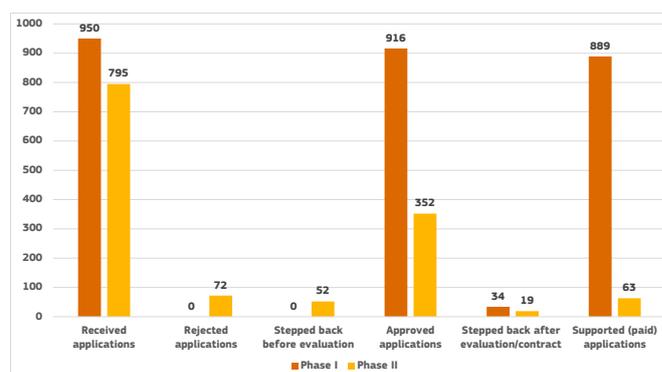
Expected or achieved results

For Phase I, out of the 950 received applications, 916 were approved. Out of these, 889 had been funded (paid) as of December 2012 (Figure 1). The number of paid application increased to 897 as of March 2013⁹.

For Phase II, by March 2013, the number of applicants stepping back increased to 24, leaving the number of approved applications

at 347. As of March 2013, payment had been made to 125 of these¹⁰.

Figure 1: Number and status of applications as of December 2012

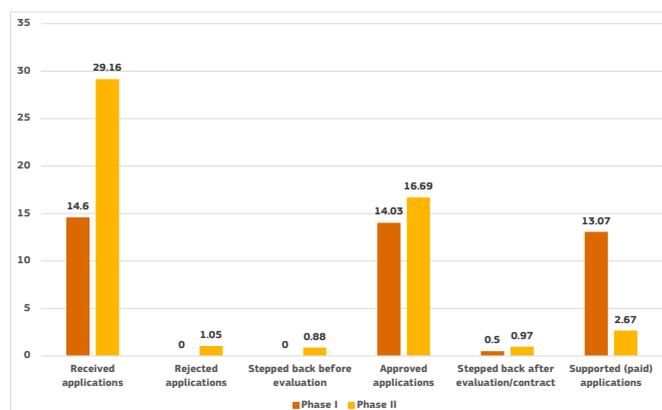


Source: ÉMI, 2013.

As of December 2012, under Phase I, HUF 14.03 billion (EUR 45.2 million) were granted to the approved applications, almost matching the initial requested amount (HUF 14.6 billion, i.e. EUR 47 million). The amount actually paid out amounted to HUF 13.07 billion (EUR 42.1 million) (Figure 2). This increased to HUF 13.21 billion (EUR 42.6) by March 2013, i.e. 94% of the amount to be granted.

Under Phase II, as of December 2012, only HUF 2.67 billion (EUR 8.6 million) had been paid out to support the approved applications (Figure 2). By March 2013, it increased to HUF 5.8 billion (EUR 18.7 million). This represents only 35% of the resources to be allocated for the 347 approved projects (with a total value of HUF 16.61 billion, i.e. EUR 53.7 million)¹¹.

Figure 2: Value of applications as of December 2012 (HUF billion)

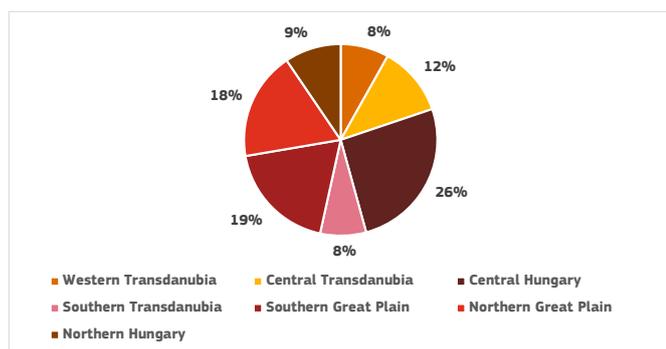


Source: ÉMI, 2013.

As of December 2012, in terms of regional distribution, 26% of the total value to be granted to approved applications under Phase I (i.e. HUF 14.03 billion) was allocated to Central Hungary (i.e. HUF

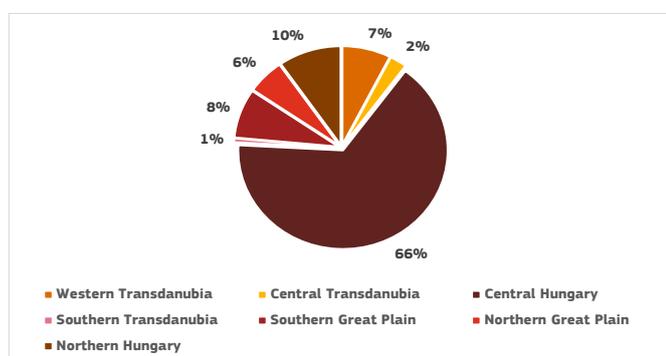
3.64 billion – EUR 11.7 million) (Figure 3). The regional distribution of funds to be granted under Phase II (HUF 16.69 billion as of December 2012) is more heterogeneous (Figure 4). In fact, 66% of the support was directed to Central Hungary alone, i.e. HUF 10.96 billion (EUR 35.3 million)¹².

Figure 3: Regional distribution of value to be granted to approved applications (Phase I), as of December 2012 (%)



Source: ÉMI, 2013.

Figure 4: Regional distribution of value to be granted to approved applications (Phase II), as of December 2012 (%)



Source: ÉMI, 2013.

The 916 projects approved under Phase I involved interventions on over 46,400 dwellings, estimated to result in a planned CO₂ reduction of 33,112 tonnes/year and energy savings of 245 million kWh/year. As for the 347 approved projects under Phase II (as of March 2013), they involved over 30,000 dwellings, were associated with a planned CO₂ reduction of 44,432 tonnes/year and planned energy savings of about 195 million kWh/year¹³. As a result of the interventions, the average layer of insulation of the rehabilitated panel buildings increased from about 3 cm to 10 cm.

Perspectives and lessons learnt

From the **perspective of the government**, the programme was one of the first large-scale attempts at reducing the domestic emission of greenhouse gases in Hungary, in accordance with the Kyoto Protocol. As such, it provided a series of **lessons learnt**, particularly with regard to planning the budget to be allocated.

Indeed, during the initial phases of implementation, the value of received applications under Phase II (i.e. HUF 29.16 billion) was 76% above the available budget (HUF 16.6 billion), showing a higher than expected interest in the programme. From the **perspective of interested investors**, the limited financial resources, together with suboptimal clarity and transparency in communicating their availability, created a feeling of uncertainty, restraining the full financial potential of the programme.

From the **perspective of the beneficiaries**, the programme came at a time when households were experiencing very high energy bills, which constituted one of the main drivers for the uptake of the initiative. Indeed, about half of all prefabricated buildings in Hungary have been rehabilitated, as a direct and indirect result of the programme. In fact, the programme kick-started the market for thermal rehabilitation, setting a positive trend. However, beneficiaries often did not have sufficient financial resources to afford their share of the rehabilitation costs, due to the high VAT of 27%, reducing the financial attractiveness of the works under the programme. Thus, there was a risk of beneficiaries often turning to undeclared work for the rehabilitation interventions.

Furthermore, the programme had an unforeseen effect on the market. Upon its introduction, **providers of energy-efficiency solutions** increased their prices, resulting in a price inflation. This decreased the efficiency of the programme, making it less accessible to beneficiaries. In fact, since the programme focused on multi-storey buildings, renovation works needed to be approved by all owners. The sudden price increase therefore created problems for its uptake, leading to many applicants stepping back and withdrawing their applications.

From the perspective of **beneficiaries and construction companies** alike, a further limitation was related to the lengthy, slow and bureaucratic procedures to announce the projects to be supported, and to process the payment of funds. This could explain the fact that only 35% of the value of approved projects was actually paid out as of March 2013, with repercussions on the effectiveness of the programme's support to households and construction companies.

From the perspective of the **construction industry**, the programme contributed to supporting the sector at the height of the recession in 2009. However, the implementation of the programme was delayed by two years, in order to reduce government deficit as part of the deal with the International Monetary Fund (IMF). According to the Hungarian Passive House Association (*Magyar Passzívház Szövetség - MAPASZ*), if the initiative had been started within the initial time frame, it could have mitigated the collapse of the construction industry through a positive multiplier effect.

Despite the significant potential for energy efficiency refurbishments of residential buildings, MAPASZ believes that, in general, government's efforts are focused predominantly on the utilisation of national and EU funds for the rehabilitation of the public stock, while not enough resources are allocated for private buildings. A **recommendation** in this respect would be the introduction of innovative financing methods, such as a revolving fund activity, which would achieve a higher leverage (about 1:10-1:20), implying that every HUF 1 invested by the state results in HUF 10-20 from the market¹⁴. However, MAPASZ believes that higher involvement of the Public Administration would be needed for the effective implementation of this type of measure.

Comparison with other analytical sources

This Fact Sheet concurs with other analytical sources:

- Country Fact Sheet Hungary¹⁵ in the sections:
 - Access to housing;
 - Climate and energy;
 - Innovation in the construction sector
 - National & Regional Policy & Regulatory Framework;
 - Current Status & National Strategy to meet Construction 2020 Objectives.

Endnotes

- ¹ According to Act CXXXIII of 2003 on Condominiums, a condominium property is established when, in a building, at least two stand-alone apartments or rooms not used as apartments, or at least one stand-alone apartment and one room not used as apartment specified in the charter document and technically divided become the separate properties of the co-owners (i.e. a form of co-ownership of a building). A housing cooperative is different from a condominium inasmuch as it has separate assets and it is a legal entity. <http://www.eui.eu/Documents/DepartmentsCentres/Law/ResearchTeaching/ResearchThemes/EuropeanPrivateLaw/RealPropertyProject/Hungary.PDF>
- ² A magyar lakóépületekben rejlő energiahatékonysági potenciál, NegaJoule2020, 2011
- ³ Government Decree 323/2007 (XII. 11.) on particular rules on the implementation of Act LX of 2007 on the Implementation Framework of the United Nations Framework Convention on Climate Change and its Kyoto Protocol.
- ⁴ These are multi-family residential buildings with 4 to 30 dwellings per building. Usually built before World War II, damaged and not renovated.
- ⁵ Építésügyi Minőségellenőrző Innovációs Nonprofit Kft., Audit Jelentes. April 2013. http://energiakontrollprogram.hu/sites/energiakontrollprogram.hu/files/2012_audit.pdf
- ⁶ Ministry of National Development, GIS Climate Friendly Home Panel Sub-Program. <http://zbr.kormany.hu/panel>
- ⁷ Ministry of Rural Development, Hungary: Green Investment Scheme - Annual Report 2009. April 2010.

http://zbr.kormany.hu/download/7/82/00000/Annual_Report-2009_eng.pdf

⁸ Ministry of National Development - Zöld Beruházási Rendszer - ZBR Klímabarát Otthon Panel Alprogram, 2009. <http://zbr.kormany.hu/zbr-klimabarar-otthon-panel-alprogram>

⁹ Építésügyi Minőségellenőrző Innovációs Nonprofit Kft., Zöld Beruházási Rendszer, Záró jelentés. April 30th, 2013. http://energiakontrollprogram.hu/sites/energiakontrollprogram.hu/files/zar_o_jelentes.pdf

¹⁰ Ibidem.

¹¹ Ibidem.

¹² Ibidem.

¹³ Ibidem.

¹⁴ Ministry of National Development, Hungarian Green Investment Scheme. March 2011.

http://zbr.kormany.hu/download/a/72/00000/Interested%20in%20buying%20AAUs%20from%20Hungary%20_EHval.pdf

¹⁵ European Construction Sector Observatory, Country Fact Sheet Hungary, March 2016, http://ec.europa.eu/growth/sectors/construction/observatory/index_en.htm